EPA Question	Response	Records/Information Available
Section 1.0 - Respondent Information		
Provide the full legal, registered name and mailing address of Respondent.	Portland General Electric Company 121 SW Salmon Street Portland, OR 97204	
For each person answering these questions on behalf of Respondent, provide:		
Site Owner/Operator: Portland General Electric		
a. full name;	Arya Behbehani	
b. title;	Manager, Environmental Services	
c. business address; and	121 SW Salmon Street m/s 3WTCBR05 Portland, OR 97204	
d. business telephone number, electronic mail address, and FAX machine number.	Business Telephone Number: 503-464-8141 Electronic Mail Address: Arya.Behbehani@pgn.com Fax Number: 503-464-8527	
Site Consultant: URS Corporation		
a. full name;	David Weatherby, RG; Anne Gire	
b. title;	Senior Project Manager; Environmental Scientist	
c. business address: and	111 SW Columbia, Suite 1500 Portland, OR 97225-5850	
d. business telephone number, electronic mail address, and FAX machine number.	Business Telephone Number: 503-222-7200 Electronic Mail Address: David.Weatherby@urs.com; Anne.Gire@urs.com Fax Number: 503-222-4292	
If Respondent wishes to designate an individual for all future correspondence	Arya Behbehani Portland General Electric Manager, Environmental Services	
concerning this Site, please indicate here by providing that individual's name, address, telephone number, fax number, and, if available, electronic mail address.	121 SW Salmon Street - 3WTCBR05 Portland, OR 97204 Telephone Number: 503-464-8141 Fax Number: 503-464-8527 Electronic Mail Address: Arya.Behbehani@pqn.com	

EPA Question	Response	Records/Information Available
Section 2.0 - Owner/Operator		
4. Identify each and every Property that Respondent currently owns, leases, operates on, or otherwise is affiliated or nistorically has owned, leased, operated on, or otherwise been affiliated with within the Investigation Area during the period of investigation (1937 to Present). Please note that this question includes any aquatic lands owned or leased by		
Respondent.		
g. Activities	Power Plant  Power plant improvements including the addition of a power house extension, rebuilding of exisiting boilers, and addition of a second boiler room.  Prom at least 1946 until approximately 1956, the 75-ton Whiting bridge crane at the power plant engine room at Station L was used for the handling (unloading, servicing, and loading) of heavy power transformers and equipment used in the PGE Portland Division. Due to the presence of the crane, Station L was the recieiving point for this class of equipment during this time period.  Ancillary Facilities & Operations  Petween 1957 and 1959, an oil tank farm was added to the southeast portion of Parcel H.  Other PGE Facilities  Central Division Garage (also known as Market Street Garage) - Located in the northeastern area of Parcel A. It was used for maintenance and repair of PGE fleet vehicles from 1927 to 1986  Garage Fueling Station — Located on Parcel A, adjacent to the Central Division Garage. It was used for fueling fleet vehicles sometime between 1927 and 1945 to 1986.  In 1996, the sediment cap was inspected by CH2MHill following a flood event. The sediment cap was also inspected in 2001, 2006 and 2011 by Bridgewater Group, on behalf of PGE. The Station L cap has remained stable and there is no evidence of erosion. The cap is planned for re-inspection in 2016.	

EPA Question	Response	Records/Information Available
6. Identify any persons who concurrently with you exercises or exercised actual control or who held significant authority to control activities at each Property, including:		
b. any contractor, subcontractor, or licensor that exercised control over any materials handling, storage, or disposal activity on the Property; (service contractors, remediation contractors, management and operator contractors, licensor providing technical support to licensed activities);	General contractors that PGE has hired to perform power plant equipment installation/repairs and site construction activities include: C.C. Moore & Company (boiler repair in 1930s), Ray F Becker Company (oil storage building construction in 1958), Portland Road and Driveway Company (madadam apron construction around AST area in 1958), G. Ed Weller (paint ASTs in 1958), Harder Industrial Contractors (install oil heating facility & pump station with pumps at the AST area, steam lines from Station L power plant to the AST area, and oil transfer lines between the AST area and the Station L power plant in 1958), Rushlight Austomatic Sprinkler Company (install water main and hydrants in 1958), Bert Crosswhite (grade AST area and construct access road in 1959), and General Construction Company (reconstruct mooring dolphin in 1969).	
Section 3.0 - Description of Each Property		
13. Provide the following information about each Property identified in response to Question 4:		
d. surface structures (e.g., buildings, tanks, pipelines, etc.);	<ul> <li>the 1930s, power plant improvements were made including rebuilding the existing boilers, adding a second boiler room, and addition of a power house extension.</li> <li>Tank Farm — Between 1957 and 1959, a tank farm with a 96,690-barrel AST was constructed on Parcel H;</li> <li>Fuel oil pipelines ran from the Station L oil docks to the Station L power plant (Parcel C).</li> <li>Fuel oil pipelines ran from the oil dock (Parcel I) to the AST in the tank farm (Parcel H) and the Station L power plant (Parcel C).</li> <li>Other PGE Facilities</li> <li>Garage Fueling Station —Sometime between 1927 and 1945, the fueling station was constructed on Parcel A adjacent to the Central Division Garage and included five gas pumps, a canopy with overhead lube rack, and an attendant station, as well as eight USTs.</li> <li>Filter House — From sometime prior to 1945, the filter house was located on Parcel C.</li> <li>Pole Operations Shed and Stiff-leg Steam Derrick (crane used to move poles) - From sometime prior to 1945 until sometime between 1966 and 1975, the Pole Operations Shed and stiff-leg steam derrick were located on Parcel A.</li> </ul>	Question 13 Attachments Q13d_1957-12-18 Fuel Oil Storage Piping Plan.pdf Q13d_1973-5-18 Oil Pipes and Storage Tanks.pdf Q13d_1930s_Hog Fuel Pile.pdf Q13d_1960s_Station L Yard Site Photos.pdf Q13d_1962_Fuel Line.pdf Q13d_1969_Misc. Buildings South of Station L.pdf Q13d_1969-1972_Drag Head Pully & Western Views from Oil Tank.pdf Q13d_1971_Station L Site Photographs.pdf Q13d_Drag Pile_Power Station L.pdf Q13d_No 16 Boiler.pdf Q13d_No 16 Boiler.pdf Q13d_Station L Boiler No 16.pdf  Also see Question 15 Attachments Q15_1953-12-16 Service Center Study.pdf

EPA Question	Response	Records/Information Available
g. treatment or control devices (e.g., surface water, air, groundwater, Resource Conservation and Recovery Act (RCRA), Transfer, Storage, or Disposal (TSD), etc.);	<ul> <li>In 1989, PGE pumped, treated, and discharged the water contents (liquid) from two of the Station L USTs (likely EY-03 and EY-04) into the municipal sanitary sewer; see the documents (Q50_1989-03-06_PGE to BES_UST Discharge-B.pdf, Q50_1988-06-13 PGE-Hess_BES-Edmonds.pdf, Q50_1988-06-29 BES-Edmonds to PGE-Hess.pdf, Q50_1988-10-25 PGE-Hess to CoP Edmonds.pdf)</li> </ul>	Also see Question 50 Attachments Q50_1988-06-13 PGE-Hess_BES-Edmonds.pdf Q50_1988-06-29 BES-Edmonds to PGE-Hess.pdf Q50_1988-10-25 PGE-Hess to CoP Edmonds.pdf Q50_1989-03-06_PGE to BES_UST Discharge-B.pdf
i. stormwater drainage system, and sanitary sewer system, past and present, including septic tank(s) and where, when and how such systems are emptied and maintained;	To the best of PGE's knowledge, after reasonable inquiry, at least in the early 1990s, stormwater accumulated in the Station L tank farm was manually released to the stormwater drainage system after visual inspection and/or laboratory testing; see the documents (Q15_1990-02-16 Katkansky to Lawson.pdf, Q15_1990-12-12 Katkansky on Release of Water.pdf, and Q15_1991-05-23 Katkansky to Norton.pdf) attached in response to Question 15.	Also see Question 15 Attachments Q15_1990-02-16 Katkansky to Lawson.pdf Q15_1990-12-12 Katkansky on Release of Water.pdf Q15_1991-05-23 Katkansky to Norton.pdf
j. subsurface disposal field(s), Underground Injection Control (UIC) wells, and other underground structures (e.g., underground storage tanks (USTs); and where they are located, if they are still used, and how they were closed.	To the best of PGE's knowledge, after reasonable inquiry, these USTs were installed sometime sometime between 1927 and 1945 when the garage service station was constructed.	
k. any and all major additions, demolitions or changes on, under or about the Property, its physical structures or to the Property itself (e.g., stormwater drainage, excavation work); and any planned additions, demolitions or other changes to the Property;	<ul> <li>Major modifications included:</li> <li>1930s – Station L power plant improvements including the addition of a power house extension, rebuilding of exisiting boilers, and addition of a second boiler room</li> <li>1927 – Construction of the Central Division Garage (Market Street garage)</li> <li>Sometime between 1927 and 1945 – Construction of the garage fueling station and system</li> <li>Sometime prior to 1945 – Construction of the central division garage (Market Street garage), garage fueling station and system, PGE Station L office, filter house, pole operations shed, machine shop, and electricians building, as well as installation of the stiff-leg steam derrick in the pole yard</li> <li>Between 1957 and 1959 – Construction of a second oil dock south of the power plant and an oil storage tank farm, including a 96,690-barrel AST</li> <li>Early 1960s – Oregon DOT constructed Marquam Bridge</li> <li>Between 1966-1969 – Improvements of the oil dock</li> <li>Sometime between 1966 and 1975 – Removal of the pole operations shed, stiff-leg steam derrick and electricians building</li> <li>1971 – Replacement of the loading dock</li> <li>1982 – Improvements of the oil dock for vessel docking</li> </ul>	Question 13 Attachments Q13k_1930_2550 HP Boiler.pdf Q13k_1930_35000 KW Boiler.pdf Q13k_1930_35000 KW Turbine.pdf Q13k_1930_35000 KW Turbine H2O Heater.pdf Q13k_1930_35000 KW Turbine Valves.pdf Q13k_1930_Boiler 13 Water Wells.pdf Q13k_1930_Condenser #1.pdf Q13k_1930_Condenser #2.pdf Q13k_1930_Crane.pdf Q13k_1930_Switches & Breakers.pdf Q13k_1930_Switches & Breakers.pdf Q13k_1930_Switching Structure.pdf Q13k_1930_Transformers.pdf Q13k_1930_Transformers.pdf Q13k_1930_Hisc.pdf Q13k_1930_Misc Electrical.pdf Q13k_1930_Misc.pdf Q13k_1936_Boiler #14 Rebuild Photos.pdf Q13k_1936_CCMoore Engineers P&C - Boiler #14.pdf Q13k_1936_Increasing Capcity of Boiler #14.pdf Q13k_1937_Babcock&Wilcox - Boiler #14 Tubes.pdf Q13k_1937_Increased Boiler Capacity - Boiler #16.pdf

EPA Question	Response	Records/Information Available
		Q13k_1938-10_Prelim Rprt Tube Failure - Boil #16.pdf Q13k_1938-11_CCMoore Engineers P&C - Boil #16.pdf Q13k_1938_Northern Equip - Boiler #14 Reg.pdf Q13k_1939-04_Prog Rprt Scale - Boiler #16.pdf Q13k_1939-11_2nd Prog Rprt Scale - Boiler #16.pdf Q13k_1952 Underground Cables Article.pdf Q13k_1958-01-13_Fire Marshal Oil Strg Approval.pdf Q13k_1958-05-22_COP Oil Storage Bldg Permit.pdf Q13k_1958-05_Becker Oil Storage Bldg PO.pdf Q13k_1958-05_Becker Oil Storage Bldg POs & Invoice.pdf Q13k_1958_Oil Storage P&C - Macadam Apron.pdf Q13k_1958_Oil Storage P&C - Oil Handle & Xfer Install.pdf Q13k_1958_Oil Storage P&C - Painting.pdf Q13k_1958_Oil Storage P&C - Water Main & Hydrants.pdf Q13k_1959-06_COP-PGE Bull Run Fill Agreement.pdf Q13k_1959-07_Bert Crosswhite Gravel PO-Reciepts.pdf Q13k_1962_Station L Site during Marquam Br Constr.pdf Q13k_1964_Flood Damage.pdf Q13k_1966_C-8823 Tanker Moorage Walkway Ext.pdf Q13k_1966_D-5628 Tanker Moorage Oil Line Reloc.pdf Q13k_1969_P&C - Reconst Mooring Dolphin.pdf Q13k_1971_Old vs New Loading Ramp.pdf Q13k_1971_Photos South of Station L.pdf Q13k_1971_River Bank South of Station L.pdf Q13k_1971_River Bank South of Station L.pdf
I. all maps and drawings of the Property in your possession; and	Please refer to the attached figures and site photographs.	Question 13 Attachments Q13I_1928-11-01_Prop Ext Sawdust Pile.pdf Q13I_1928-11-05_Ref Points for Fuel Pipe.pdf Q13I_1929-08-22_Pole Yard.pdf Q13I_1974-04-24_River Bank Protection.pdf
15. For each Property, provide all reports, information or data you have related to soil, water (ground and surface), or air quality and geology/hydrogeology at and about each Property. Provide copies of all documents containing such data and information, including both past and current aerial photographs as well as	To the best of PGE's knowledge, after reasonable inquiry, the following summarizes the reports, information, or data PGE has related to soil, water (ground and surface), or air quality and geology/hydrogeology at Station L:  • In 1953, PGE conducted a Service Center Study for the PGE Portland Division. This study evaluated the service facilities used in the Portland Division operations for efficiency and adequacy for long term PGE operations. The Station L Market Street garage, pole and storage yard, and Station L power plant (for use of its 75-ton whiting bridge crane) were included in this study; see the attached document (Q15_1953-12-16 Service Center Study.pdf).	Question 15 Attachments Reports Q15_1985 Marquam Foundation Report.pdf Q15_1990-02-16 Katkansky to Lawson.pdf Q15_1990-12-12 Katkansky on Release of Water.pdf Q15_1991-05-23 Katkansky to Norton.pdf Q15_1953-12-16 Service Center Study.pdf  Photographs Q15_1988-Aug-Sept_Crowley Env. Photos.pdf

EPA Question	Response	Records/Information Available
documents containing analysis or interpretation of such data.	After retirement of the Station L power plant in 1975, PGE evaluated several alternatives for the future development of Station L, including donation of the property.  • In 1985, ODOT completed a foundation investigation for the Marquam Bridge widening project; see the attached document (Q15_1985 Marquam Foundation Report.pdf).  During the Station L Phase I, II, and III investigations (1988-1994), many reports, documents, and correspondence were prepared by PGE or its consultants documenting the progress and completion of the Station L investigations and remediation; see the attached documents (Q15_1990-02-16 Katkansky to Lawson.pdf, Q15_1990-12-12 Katkansky on Release of Water.pdf, Q15_1991-05-23 Katkansky to Norton.pdf)  In 1996, the sediment cap was inspected by CH2MHill following a flood event; see the attached document (Q15_1996 CH2MHill Cap Inspection.pdf). The sediment cap was then inspected in 2001 and 2006 by Bridgewater Group, on behalf of PGE; see the attached inspection report (Q15_200182006 Bridgewater Cap Inspections.pdf) and the attached 2001, 2006 and 2011 sediment cap inspection videos (Q15_2001-12-14 Inspection Disc 1.wmv, Q15_2001-12-14 Inspection Disc 2.wmv, Q15_2006 OMSI Shore Survey.wmv, Q15_2011 PGE Sediment Cap VIDEO1_TS.VOB and Q15_2011 PGE Station L Cap VIDEO2_TS.VOB).  Photographs taken during the remedial activities at Station L are attached (Q15_1987-10-09_Photos - Market Street Garage.pdf, Q15_1988-Aug-Sept_Crowley Env. Photos.pdf, Q15_1989_Station L Upland Remediation Photos B.pdf,).	Q15_1989_Station L Upland Remediation Photos A.pdf Q15_1989_Station L Upland Remediation Photos B.pdf
16. Identify all past and present solid waste management units or areas where materials are or were in the past managed, treated, or disposed (e.g., waste piles, landfills, surface impoundments, waste lagoons, waste ponds or pits, tanks, container storage areas, etc.) on each Property. For each such unit or area, provide the following information:		
a. a map showing the unit/area's boundaries and the location of all known	Station L Power Plant and Ancillary Facilities/Operations	Also see Question 15 Attachments Q15_1953-12-16 Service Center Study.pdf

EPA Question	Response	Records/Information Available
units/areas whether currently in operation or not. This map should be drawn to scale, if possible, and clearly indicate the location and size of all past and present units/areas;  b. dated aerial photograph of the site showing each unit/area;  c. the type of unit/area (e.g., storage area, landfill, waste pile, etc.), and the dimensions of the unit/area;  d. the dates that the unit/area was in use;  e. the purpose and past usage (e.g., storage, spill containment, etc.);  f. the quantity and types of materials (hazardous substances and any other chemicals) located in each unit/area and;	<ul> <li>Hog Fuel Storage - Hog fuel was also transported to Station L via barge through the early 1950s.</li> <li>From a period following 1946, a 75-ton Whiting bridge crane at the power plant engine room at Station L was used for the handling (unloading, servicing, and loading) of heavy power transformers (≥1,000 KVA) and equipment used in the PGE Portland Division. Station L was the recieiving point for this class of equipment during this time period. After receiving and processing (inspecting and assembling, as required) these transformers, they were hauled to a PGE station or substation for installation and use. Sometimes, due to damage in shipping or cases where installed transformers needed maintenance not possible in the field, they were untanked at Station L or another location with an adequate crane. Between the years of 1946 to 1953, 77 transformers of ≥ 3,000 KVA were received and processed at Station L. See the document attached to Question 15 (Q15_1953-12-16 Service Center Study.pdf). To the best of PGE's knowledge, after reasonable inquiry, PGE does not know the quantity of transformers received/handled at Station L for other years.</li> <li>The insulation oil removed from the transformers was filtered and used again providing it met the required specifications. If it failed to pass the tests or was too dark in color, it was barreled and sent to the reclamation plant at Columbia Substation. Columbia substation was located at Columbia Blvd and N. Vancouver, outside the investigation area. However, a limited portion of oils from decommissioned transformers was not reused in transformers again. This oil was not dumped, but was reused as fuel at the Station L site; see the document attached to Question 15 (Q15_1953-12-16 Service Center Study.pdf). To the best of PGE's knowledge, after reasonable inquiry, PGE does not know the quantity of burned transformer oil received at Station L and used for fuel oil.</li> </ul>	
g. the construction (materials, composition), volume, size, dates of cleaning, and condition of each unit/area.	Central Division Garage (also known as Market Street Garage) - Used for maintenance and repair of PGE fleet vehicles from at least 1927to 1986, the Central Division Garage was located in the northeastern area of Parcel A. The garage was a single-story, 103 by 242 ft structure constructed of concrete and steel. It was designed to accommodate approximately 90 vehicles. In 1953, there were 93 vehicles stored inside the garage, 76 vehicles stored just outside the garage, and 3 vehicles stored outside by the Station L power plant; see the document attached in response to Question 15 (Q15_1953-12-16 Service Center Study.pdf). Vehicle quantities likely varied by month/year. Vehicle service materials (oil, antifreeze, etc), tires, paint, and tools were also stored in the garage.  Garage Fueling Station – Used for fueling fleet vehicles from sometime between 1927 and 1945 to 1986, the Garage Fueling Station was located on Parcel A, adjacent to the Central Division Garage.	

EPA Question	Response	Records/Information Available
	<ul> <li>Lead-covered Cable Storage Area – Located in an asphalt-covered area located along the riverfront of Parcels A and B, this storage area was used to store cables (twisted copper wire wrapped in paper and covered with a lead-based shielding) on large wooden spools from approximately 1954 until sometime around 1964; see the document (Q15_1953-12-16 Service Center Study.pdf) attached in response to Question 15.</li> <li>The quantity and type of poles stored varied daily/yearly. As discussed in (Q15_1953-12-16 Service Center Study.pdf), by 1954, the majority of poles installed by PGE were pre-treated (creosote) fir poles that were stored by the supplier (McCormick and Baxter Creosoting Co) until needed.</li> </ul>	
18. For each Property, provide the following information regarding any current or former sewer or storm sewer lines or combined sanitary/storm sewer lines, drains, ditches, or tributaries discharging into the Willamette River:		
a. the location and nature of each sewer line, drain, ditch, or tributary;	To the best of PGE's knowledge, after reasonable inquiry, at least in the early 1990s, stormwater accumulated in the Station L tank farm was manually released to the stormwater drainage system after visual inspection and/or laboratory testing; see the documents (Q15_1990-02-16 Katkansky to Lawson.pdf, Q15_1990-12-12 Katkansky on Release of Water.pdf, and Q15_1991-05-23 Katkansky to Norton.pdf) attached in response to Question 15.	Also see Question 15 Attachments Q15_1990-02-16 Katkansky to Lawson.pdf Q15_1990-12-12 Katkansky on Release of Water.pdf Q15_1991-05-23 Katkansky to Norton.pdf
d. whether each sewer line, drain, ditch, or tributary drained any hazardous substance, waste, material or other process residue to the Willamette River; and	PGE discharged stormwater from the Station L stormwater system to the Willamette River during PGE's ownership. In 1990, stormwater with 1.7 ppm unspecified organics was discharged to the Willamette River via the stormwater system; see the document (Q15_1990-02-16 Katkansky to Lawson.pdf,) attached in response to Question 15. To the best of PGE's knowledge, after reasonable inquiry, other than stormwater PGE is unaware of the discharge of any waste, material, or process residue from the Station L stormwater system to the Willamette River during PGE's ownership.	See Question 15 Attachment Q15_1990-02-16 Katkansky to Lawson.pdf
e. any documentation regarding but not limited to the following on any and all outfalls to the Willamette River which are located within the boundaries of the Property(ies). Your response should include, but not be limited to:  i. the areas serviced by the outfalls; and	To the best of PGE's knowledge, after reasonable inquiry, a total of 10 current or historical outfalls discharge(d) to the Willamette River along the former Station L property. Their locations are shown in the document (Q13b_Stormwater System Map.pdf) attached in response to Question 13b. Two of these outfalls drain stormwater from the Marquam Bridge. The remaining eight outfalls historically drained stormwater from portions of the Station L property. To the best of PGE's knowledge, after reasonable inquiry, the following summarizes the information regarding these outfalls, from northernmost to southernmost:  • Three outfalls were owned by PGE and served Parcels A and C, discharging	See Question 13 Attachments Q13b_Stormwater System Map.pdf

EPA Question	Response	Records/Information Available
ii. the type of outfall (i.e., stormwater or single facility operational).	stormwater to the Willamette River; see the document (Q13b_1986 Upper Sta L Figure.pdf) attached in response to Question 13b. These are numbered Outfalls #1, 2, and 5 in the document (Q13b_Stormwater System Map.pdf) attached in response to Question 13b. Outfall #1 is currently in service and owned by the current property owner (the Portland Development Commission). Outfalls #2 and #5 have been removed.  • Two outfalls were (and still are) owned by the Oregon DOT and drain stormwater from the Marquam Bridge; see Outfalls #3 and 4 in the document (Q13b_Stormwater System Map.pdf) attached in response to Question 13b.  • An outfall (City Outfall 32) owned by the City of Portland serves various offsite properties; see Outfall #6 in the document (Q13b_Stormwater System Map.pdf) attached in response to Question 13b. During the operation of Station L, this outfall was located slightly south of its present location (location #6a in the document, Q13b_Stormwater System Map.pdf, attached in response to Question 13b). This former outfall historically served Stephens Substation and the PTC property (east of Station L); see the document (Q13b_1986 Upper Sta L Figure.pdf) attached in response to Question 13b. To the best of PGE's knowledge, after reasonable enquiry, the outfall was moved to its current location by the City of Portland in 1994. Stormwater from the Stephens Substation is no longer discharged to City Outfall 32. The Stephens Substation is addressed in a separate 104(e) response.  • A seventh outfall was histrically owned by PGE and served the northern portion of Parcel C. It appears to have collected site stormwater and drainage from the Station L power plant, as well as stormwater from other areas of Parcel C, and discharged water to the river; see the documents (Q13b_1986 Upper Sta L Figure.pdf and Q13b_Mrkt St Garage Fencing & Drainage.pdf) attached in response to Question 13b. This outfall is numbered Outfall #7 in the document (Q13b_Stormwater System Map.pdf) attached in response to Question 15b. This outfa	

EPA Question	Response	Records/Information Available
	<ul> <li>3-2 in the document (Q15_1994-08 CH2M_Phase III_Site Invest RevFinal.pdf) attached in response to Question 15. To the best of PGE's knowledge, after reasonable enquiry, this outfall has been abandoned.</li> <li>The final outfall that was owned by PGE, located in the southwest corner of Parcel I, released stormwater from the sump in the southwest corner of the tank farm to the river; see the document (Q13b_1986 Upper Sta L Figure.pdf) attached in response to Question 13b. This outfall is numbered Outfall #10 in the document (Q13b_Stormwater System Map.pdf) attached in response to Question 13b.</li> </ul>	
Section 4.0 - Respondent's Operational Activities		
21. At each Property, did you ever use, purchase, generate, store, treat, dispose, or otherwise handle any waste, or material? If the answer to the preceding question is anything but an unqualified "no," identify:	Employee interviews detailed in the documents (Q21c_1987-05-27_Memo_Poss Burial of Capacitors.pdf and Q21c_1987-04-30 Memo_Meeting Minutes.pdf) attached in response to Question 21c, suggest that carcasses of old capacitors may have been buried at Station L. PGE believes that these employees' recollections were mistaken. The PGE Station L bulldozer operator stated in an interview that he never saw any capacitors in the fill material and that if there had been any he would have seen them; see the document (Q21c_1987-09-08 Norton on Fill Operations.pdf) attached in response to Question 21c.	Question 21 Attachments Q21c_1987-05-27_Memo_Poss Burial of Capacitors.pdf Q21c_1987-04-30 Memo_Meeting Minutes.pdf Q21c_1987-09-08 Norton on Fill Operations.pdf
a. in general terms, the nature and quantity of the waste or material so transported, used, purchased, generated, stored, treated, disposed, or otherwise handled;	Station L Power Plant and Ancillary Facilities/Operations From a period following 1946, a 75-ton Whiting bridge crane at the Station L power plant engine room was used for the handling (unloading, servicing, and loading) of heavy power transformers and equipment used in the PGE Portland Division. Due to the presence of the crane, Station L was the receiving point for this class of equipment during this time period.  Transformer oil was contained inside sealed electrical equipment and did not require handling or intervention under normal conditions. PGE historically maintained a very active and successful insulating oil reuse program and believes that it may have occasionally replaced the transformer oil in large transformers. This program saved PGE and its rate payers significant costs. The insulation oil removed from the transformers is filtered and used again providing it meets the required specifications. If it fails to pass the tests or is too dark in color, it is barreled and sent to the reclamation plant at Columbia Substation. Columbia substation was located at Columbia Blvd and N. Vancouver, outside the investigation area. However, a limited portion of oils from decommissioned transformers was not reused in transformers again. This oil was not dumped, but was reused as fuel at the Station L site.  Other PGE Facilities The following summarizes the known information on waste handling:  In 1984, PGE considered the option of disposing approximately 6,000 gallons of PCB-	Also see Question 13 Attachments Q13b_Stormwater System Map.pdf  Also see Question 15 Attachments Q15_1953-12-16 Service Center Study.pdf

EPA Question	Response	Records/Information Available
	containing oil (liquid), drained from electrical equipment and/or USTs and stored in a mobile storage skid in the east side yard at Station Lto be potentially disposed at the Union Electric Co; see the document (Q21c_1984-03-07 PCB Disposal.pdf) attached in response to Question 21c. However, to the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21c_1984-07-02 Kuiawa to O'Dell.pdf) attached in response to Question 21c, PGE did not dispose of the oil at the Union Electric Co.	
	Station L Remediation The following summarizes the waste and materials removed during the Station L remedial activities under the under the OMSI donation contingency and the Oregon DEQ consent order:	
	• In 1989, PGE pumped, treated, and discharged the water contents (liquid) from two of the Station L USTs (likely EY-03 and EY-04) into the municipal sanitary sewer. To the best of PGE's knowledge, after reasonable inquiry, PGE also discharged the water contents of the 226 waste drums (liquid-filled) that had been stored in the HP boiler room basement. See the documents (Q50_1989-03-06_PGE to BES_UST Discharge.pdf, Q50_1989-03-06_PGE to BES_UST Discharge.B.pdf, Q50_1988-06-13 PGE-Hess_BES-Edmonds.pdf, Q50_1988-06-29 BES-Edmonds to PGE-Hess.pdf, Q50_1988-10-25 PGE-Hess to CoP Edmonds.pdf, and Q50_1989-05-22_PGE to BES_UST Discharge.pdf) attached in response to Question 50, the documents (Q21a_1986-09-23 OMNI Drum Strg Sampling Rpt.pdf and Q21_1988-01-14_Disposal of Barrels in Station L.pdf) attached in response to Question 21c, and the document (Q52_1989-09-18_PGE Memo on UST Decom.pdf) attached in response to Question 52. To the best of PGE's knowledge, after reasonable inquiry, PGE does not know the total quantity of water discharged into the sewer.	
	• In March 1990, OMSI was granted permission to discharge water (that had entered the tank from a broken water main) into the Willamette River from two open USTs (EY-03 and EY-04), which had been emptied and cleaned by PGE prior to OMSI taking possession. Prior to the discharge of the water from these two OMSI USTs and due to OMSI demolition activities, water from these tanks entered into a third UST that PGE was in the process of cleaning (EY-01). Because the water was sourced from the two OMSI USTs (due to an open valve between the tanks), PGE sent a letter to the Oregon DEQ, Water Quality Section in May 1990 requesting permission to discharge the water (liquid) from PGE's UST (EY-01) to the Willamette River under the OMSI Special Permit. See the document (Q21c_1990-06-27 Riedel to PGE re USTs.pdf) attached in response to Question 21c and the documents (Q52_1990-05-10 Modification Request.pdf and Q52_1990-03-20 OMSI Permit Request.pdf) attached in response to Question 52. To the best of PGE's knowledge, after reasonable inquiry, PGE's request was granted.	
	Of the more than 10,000 tons of PCB-containing soil/materials (solid), more than 3,000 tons of soils/materials (solid) containing non-PCB contaminants (e.g.,	

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	petroleum hydrocarbons and metals), and other waste/materials (liquid and solid) (e.g., RCRA waste) removed from Station L, the following highlights the treatment and/or disposal of soil and other special waste generated during the Phase III remediation (1988-1998):  PGE recycled approximately 280 empty drums, including the 226 emptied drums from the HP boiler room basement, at Matheny Metals and sent two pallets of lead-acid batteries for reclamation; see the document (Q21c_1989-08-31 Carter to Norton.pdf) attached in response to Question 21c.  In 1994, under the Station L USEPA HWG ID number (ORD987185204), approximately 250 gallons of non-regulated waste (liquid) and 285 lbs of non-regulated empty drums (solid) were disposed of at the Arlington Landfill; see the documents (Q21c_1994 Non-Reg HW Manifests.pdf and Q21c_1993-12-13 Non-Reg Waste Profile.pdf) attached in response to Question 21c.  In 1994, PGE disposed of nine-55 gallon drums of water (liquid) and soil (solid). The drums were suspected of containing asbestos and PCBs and disposal was planned for a hazardous waste landfill; see the document (Q21c_1993-12-13 Non-Reg Waste Profile.pdf) attached in response to Question 21c. However, analyses of the contents were non-detect for PCBs, asbestos, and regulated solvents. To the best of PGE's knowledge, after reasonable inquiry, PGE disposed of the water and soil from the nine drums at the Station L Tank Farm during dry conditions and sent the empty drums to PSC for disposal; see the document (Q21c_1994-03-11 Moore on Drum Disposal.pdf) attached in response to Question 21c.	
	Soil, gravel, and absorbents (solid) were also removed from Station L in response to spills/releases. To the best of PGE's knowledge, after reasonable inquiry, the following presents all known and available information with respect to specific releases that occurred at Station L (other than the 1971 transformer spill and the remedial activities already discussed, above):	
	10 April 1980 and 9 June 1980 – Two non-PGE sourced discharges (liquid) occurred from the historical City of Portland (Outfall 32) storm drain that runs through Station L into the Willamette River; see the document (Q62_1980_Non-PGE Sourced Spills.pdf) attached in response to Question 62. PGE reported these non-PGE discharges to the Oregon DEQ. The historical City of Portland storm drain and outfall (City Outfall 32 or Outfall #6a) are shown in the document (Q13b_Stormwater System Map.pdf) attached in response to Question 13b.	
	In 1995, PGE removed the wooden dock and dolphins (solid) adjacent to Parcel I, including ACM dock steam piping(solid), prior to selling this parcel to KPTV that same year.  Approximately 6.3 cubic yards of ACM (solid) were disposed of at the Hillsboro Landfill; see the document (Q21c_1995-08-29 ACM Waste Shipment.pdf) attached in response to Question 21c.  Also see the removal specification document (Q21c_1995-05-04 Allen to OMSI McDowell.pdf) attached in response to Question 21c. To the best of PGE's knowledge, after reasonable inquiry, the non-ACM dock and dolphin waste (solid) was also likely was disposed of at the	

EPA Question	Response	Records/Information Available
	Hillsboro Landfill.	
c. how each such waste or material was used, purchased, generated, stored, treated, transported, disposed or otherwise handled by you; and	Station F Power Plant & Station L Power Plant and Ancillary Facilities/Operations From a period following 1946, a 75-ton Whiting bridge crane at the Station L power plant engine room was used for the handling (unloading, servicing, and loading) of heavy power transformers and equipment used in the PGE Portland Division. Due to the presence of the crane, Station L was the receiving point for this class of equipment during this time period.  Transformer oil was contained inside sealed electrical equipment and did not require handling or intervention under normal conditions. PGE historically maintained a very active and successful insulating oil reuse program and believes that it may have occasionally replaced the transformer oil in large transformers. This program saved PGE and its rate payers significant costs. The insulation oil removed from the transformers is filtered and used again providing it meets the required specifications. If it fails to pass the tests or is too dark in color, it is barreled and sent to the reclamation plant at Columbia Substation. Columbia substation was located at Columbia Blvd and N. Vancouver, outside the investigation area. However, a limited portion of oils from decommissioned transformers was not reused in transformers again. This oil was not dumped, but was reused as fuel at the Station L site.	Question 21 Attachments Q21c_1984-07-02 Kuiawa to O'Dell.pdf Q21c_1987-04-30 Memo_Meeting Minutes.pdf Q21c_1987-09-08 Norton on Fill Operations.pdf Q21c_1989-08-31 Carter to Norton.pdf Q21c_1990-06-27 Riedel to PGE re USTs.pdf Q21c_1994-03-11 Moore on Drum Disposal.pdf Q21c_1995-05-04 Allen to OMSI McDowell.pdf
22. Describe all activities at each Property that was conducted over, on, or adjacent to, the Willamette River. Include in your description whether the activity involved hazardous substances, waste(s), or materials and whether any such hazardous substances, waste(s), or materials were discharged, spilled, disposed of, dropped, or otherwise came to be located in the Willamette River.	PGE has conducted various operations and activities at Station L, which is adjacent to the Willamette River, including heavy power transformer loading/unloading/assembly.  PGE operations and activities over and on the Willamette River included construction of docks, pilings, and pump houses at various times; operation of the oil docks to receive and pump fuel oil from barges to the Station L power plant (early 1900s to 1965) and to the AST in the tank farm (approximately 1957 to 1965); receiving hog fuel from barges at the oil docks (early 1950s) and conveying it to the Station L power plant/hog fuel pile; and the demolition/repair of in-water structures at various times.	
27. Has Respondent ever arranged for disposal or treatment or arranged for transportation for disposal or treatment of materials to any Property (including the Willamette River) within the Investigation Area? If so, please identify every Property that Respondent's materials were disposed or treated at in the Investigation Area. In addition, identify:	Employee interviews detailed in the document (Q21c_1987-04-30 Memo_Meeting Minutes.pdf) attached in response to Question 21c, suggest that carcasses of old capacitors may have been buried at Station L. To the best of PGE's knowledge, after reasonable inquiry, these employees' recollections are mistaken. The PGE Station L bulldozer operator stated in an interview that he never saw any capacitors in the fill material and that if there had been any he would have seen them; see the document (Q21c_1987-09-08 Norton on Fill Operations.pdf) attached in response to Question 21c.	See Question 21 Attachment Q21c_1987-04-30 Memo_Meeting Minutes.pdf Q21c_1987-09-08 Norton on Fill Operations.pdf

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40. Provide copies of such contracts and other documents reflecting such agreements or arrangements, including but not limited to:  a. state where Respondent sent each type of its waste for disposal, treatment, or recycling;  b. identify all entities and individuals who picked up waste from Respondent or who otherwise transported the waste away from Respondent's operations (these companies and individuals shall be called "Waste Carriers" for purposes of this Information Request);  c. if Respondent transported any of its wastes away from its operations, please so indicate;  d. for each type of waste specify which Waste Carrier picked it up;  e. indicate the ultimate disposal/recycling/treatment location for each type of waste; and g. state the basis for and provide any documents supporting the answer to the previous question.	PGE recycled approximately 280 empty drums at Matheny Metals in 1989.	
47. Describe any process or activity conducted on a Property identified in response to Question 4 involving the acquisition, manufacture, use, storage, handling, disposal or release or threatened release of polychlorinated	From a period following 1946, a 75-ton Whiting bridge crane at the Station L power plant engine room was used for the handling (unloading, servicing, and loading) of heavy power transformers and equipment used in the PGE Portland Division. Due to the presence of the crane, Station L was the receiving point for this class of equipment during this time period.  Transformer oil was contained inside sealed electrical equipment and did not require handling or intervention under normal conditions. PGE historically maintained a very active and successful insulating oil reuse program and believes that it may have occasionally replaced the	Also see Question 21 Attachments Q21c_1984-07-02 Kuiawa to O'Dell.pdf

EPA Question	Response	Records/Information Available
biphenyl(s) ("PCB(s)" or PCB(s)-containing materials or liquids.	transformer oil in large transformers. This program saved PGE and its rate payers significant costs. The insulation oil removed from the transformers is filtered and used again providing it meets the required specifications. If it fails to pass the tests or is too dark in color, it is barreled and sent to the reclamation plant at Columbia Substation. Columbia substation was located at Columbia Blvd and N. Vancouver, outside the investigation area. However, a limited portion of oils from decommissioned transformers was not reused in transformers again. This oil was not dumped, but was reused as fuel at the Station L site.  Other oil-filled equipment transportation, disposal, or cleaning documents include:  In 1984, PGE considered the option of disposing approximately 6,000 gallons of PCB-containing oil, drained from electrical equipment and/or USTs and stored in a mobile storage skid in the east side yard at Station L, was disposed at the Union Electric Co; see the document (Q21c_1984-03-07 PCB Disposal.pdf) attached in response to Question 21c. However, to the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21c_1984-07-02 Kuiawa to O'Dell.pdf) attached in response to Question 21c, PGE did not dispose of the oil at the Union Electric Co.	
Section 5.0 - Regulatory Information		
50. Identify all federal, state and local authorities that regulated the owner or operator of each Property and/or that interacted with the owner or operator of each Property. Your response is to address all interactions and in particular all contacts from agencies/departments that dealt with health and safety issues and/or environmental concerns.	The primary federal, state and local agencies that have or may have regulated PGE at Station L include:  • NPDES permitting  Permit Related  A couple of the attached documents relate to a 1974 power plant NPDES permit that was applied for but, to the best of PGE's knowledge, after reasionable inquiry, not issued due to the closure of the power plant in 1975.	Permit Related Q50_1974-10-07_PGE to DEQ - NPDES Permit Appl.pdf Q50_1974-10-16_PGE to DEQ - NPDES Permit Appl.pdf Q50_1974-10-18_DEQ to PGE - NPDES Permit Appl.pdf Q50_1989-03-06_PGE to BES_UST Discharge-B.pdf
52. Provide a list of all local, state and federal environmental permits ever issued to the owner or operator on each Property (e.g., RCRA permits. NPDES permits, etc.). Please provide a copy of each federal and state permit, and the applications for each permit, ever issued to the owner or operator on each Property.	<ul> <li>To the best of PGE's knowledge, after reasonable inquiry, the following summarizes the environmental permits PGE was issued for Station L:         <ul> <li>Although PGE applied for a Station L power plant NPDES permit in 1974, to the best of PGE's knowledge, after reasonable inquiry, the permit was not issued due to the closure of the power plant in 1975. See the attached docuemnt (Q52_1974-09-20_DEQ to PGE - NPDES Permit Appl.pdf) and the documents (Q50_1974-10-07_PGE to DEQ - NPDES Permit Appl.pdf, Q50_1974-10-16_PGE to DEQ - NPDES Permit Appl.pdf, and Q50_1974-10-18_DEQ to PGE - NPDES Permit Appl.pdf) attached in response to Question 50.</li> <li>In addition, PGE also obtained building premits/approval for the construction of the</li> </ul> </li> </ul>	Question 52 Attachments Q52_1974-09-20_DEQ to PGE - NPDES Permit Appl.pdf  Also see Question 13 Attachments Q13k_1958-01-13_Fire Marshal Oil Strg Approval.pdf Q13k_1958-05-22_COP Oil Storage Bldg Permit.pdf Q13k_1959-06_COP-PGE Bull Run Fill Agreement.pdf  Also see Question 50 Attachments Q50_1974-10-07_PGE to DEQ - NPDES Permit Appl.pdf Q50_1974-10-16_PGE to DEQ - NPDES Permit Appl.pdf

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	oil storage tank farm facility from the City of Portland and the Fire Marshal; see the documents (Q13k_1958-01-13_Fire Marshal Oil Storage Approval.pdf, Q13k_1958-05-22_COP Oil Storage Bldg Permit.pdf, and Q13k_1959-06_COP-PGE Bull Run Fill Agreement.pdf) attached in response to Quesiton 13k.	Q50_1974-10-18_DEQ to PGE - NPDES Permit Appl.pdf
Section 6.0 - Releases and Remediation		
62. Identify all leaks, spills, or releases into the environment of any waste, including petroleum, hazardous substances, pollutants, or contaminants, that have occurred at or from each Property, which includes any aquatic lands owned or leased by Respondent. In addition, identify and provide copies of any documents regarding:  a. when such releases occurred;  b. how the releases occurred (e.g. when the substances were being stored, delivered by a vendor, transported or transferred (to or from any tanks. drums, barrels, or recovery units). and treated);  c. the amount of each hazardous substances, pollutants, or contaminants so released;  d. where such releases occurred; e. any and all activities undertaken in response to each such release or threatened release, including the notification of any agencies or governmental units about the release; f. any and all investigations of the circumstances, nature, extent or location of each release or threatened release including, the results of any soil, water (ground and surface), or air testing undertaken;	<ul> <li>In 1984, PGE considered the option of disposing approximately 6,000 gallons of PCB-containing oil, drained from electrical equipment and/or USTs and stored in mobile storage skid in the east side yard at Station L, were disposed at the Union Electric Co; see the document (Q21c_1984-03-07 PCB Disposal.pdf) attached in response to Question 21c. Based on the document (Q21c_1984-07-02 Kuiawa to O'Dell.pdf) attached in response to Question 21c, the job was not authorized and PGE did not dispose of the oil at the Union Electric Co.</li> </ul>	Also see Question 21 Attachments Q21c_1984-07-02 Kuiawa to O'Dell.pdf

EPA Question	Response	Records/Information Available
g. all persons with information relating to these releases; and h. list all local, state, or federal departments or agencies notified of the release, if applicable;		
Section 7.0 - Property Investigations		
71. Describe the purpose for, the date of initiation and completion, and the results of any investigations of soil, water (ground or surface), sediment, geology, and hydrology or air quality on or about each Property, Provide copies of all data, reports, and other documents that were generated by you or a consultant, or a federal or state regulatory agency related to the investigations that are described.	To the best of PGE's knowledge, after reasonable inquiry, the following summarizes the reports, information, or data PGE has related to soil, water (ground and surface), or air quality and geology/hydrogeology at Station L:  In 1953, PGE conducted a Service Center Study for the PGE Portland Division. This study evaluated the service facilities used in the Portland Division operations for efficiency and adequacy for long term PGE operations. The Station L Market Street garage, pole and storage yard, and Station L power plant (for use of its 75-ton Whiting bridge crane) were included in this study; see the attached document (Q15_1953-12-16 Service Center Study.pdf).  After retirement of the Station L power plant in 1975, PGE evaluated several alternatives for the future development of Station L, including donation of the property.  In 1985, ODOT completed a foundation investigation for the Marquam Bridge widening project; see the attached document (Q15_1985 Marquam Foundation Report.pdf).  In 1996, the sediment cap was inspected by CH2MHill following a flood event; see the attached document (Q15_1996 CH2MHill Cap Inspection.pdf). The sediment cap was also inspected in 2001 and 2006 by Bridgewater Group, on behalf of PGE; see the inspection reports (Q15_2001&2006 Bridgewater Cap Inspections.pdf) attached in response to Question 15 and the 2001, 2006 and 2011 sediment cap inspection videos (Q15_2001-12-14 Inspection Disc 1.wmv, Q15_2001-12-14 Inspection Disc 2.wmv, Q15_2006 OMSI Shore Survey.wmv, Q15_2011 PGE Sediment Cap VIDEO1_TS.VOB and Q15_2011 PGE Station L Cap VIDEO2_TS.VOB) attached in response to Question 15. The Station L cap has remained stable and there is no evidence of erosion. The cap is planned for re-inspection in 2016.  Photographs taken during the remedial activities at Station L are attached in response to Question 15 (Q15_1988-Aug-Sept_Crowley Env. Photos.pdf, Q15_1989_Station L Upland Remediation Photos A.pdf, Q15_1989_Station L Upland Remediation Photos B.pdf).	

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72. Describe any remediation or response actions you or your agents or consultants have ever taken on each Property either voluntarily or as required by any state or federal agency. If not otherwise already provided under this Information Request, provide copies of all investigations, risk assessments or risk evaluations, feasibility studies, alternatives analysis, implementation plans, decision documents, monitoring plans, maintenance plans, completion reports, or other document concerning remediation or response actions taken on each Property.	<ul> <li>In 1989, PGE pumped, treated, and discharged the water contents from two of the Station L USTs (likely EY-03 and EY-04) into the municipal sanitary sewer. To the best of PGE's knowledge, after reasonable inquiry, PGE also discharged the contents of the 226 waste drums that had been stored in the HP boiler room basement. See the documents (Q50_1989-03-06_PGE to BES_UST Discharge.pdf, Q50_1989-03-06_PGE to BES_UST Discharge.pdf, Q50_1989-03-06_PGE to BES_UST Discharge.pdf, Q50_1988-06-29 BES-Edmonds to PGE-Hess.pdf, Q50_1988-10-25 PGE-Hess to CoP Edmonds.pdf and Q50_1989-05-22_PGE to BES_UST Discharge.pdf).</li> <li>In March 1990, OMSI was granted permission to discharge water (that had entered the tank from a broken water main) into the Willamette River from two open USTS (EY-03 and EY-04), which had been emptied and cleaned by PGE prior to OMSI taking possession. Prior to the discharge of the water from these two OMSI USTs and due to OMSI demolition activities, water from these tanks entered into a third UST that PGE was in the process of cleaning (EY-01). Because the water was sourced from the two OMSI USTs (due to an open valve between the tanks), PGE sent a letter to the Oregon DEQ, Water Quality Section in May 1990 requesting permission to discharge the water from PGE's UST to the Willamette River under the OMSI Special Permit. See the document (Q21c_1990-06-27 Riedel to PGE re USTs.pdf) attached in response to Question 21c and the documents (Q52_1990-05-10 Modification Request.pdf and Q52_1990-03-20 OMSI Permit Request.pdf) attached in response to Question 21c.</li> <li>In addition, PGE recycled approximately 280 empty drums, including the 226 emptied drums from the HP boiler room basement, at Matheny Metals and sent two pallets of lead-acid batteries for reclamation; see the document (Q21c_1989-08-31 Carter to Norton.pdf) attached in response to Question 21c.</li> <li>In 1994, under the Station L USEPA HWG ID number (ORD987185204), approximately 250 gallons of non-regulated waste and 285 lbs of n</li></ul>	
	attached in response to Question 21c.	

EPA Question	Response	Records/Information Available
Section 8.0 - Corporate Information		
82. Provide a description of all records available to you that relate to all of the questions in this request, but which have not been included in your responses.	Documents not included in this request are:	